

```
BBBBBBBBBBBBBB      AAAAAAAAAA      SSSSSSSSSSSSSS      RRRRRRRRRRRR      TTTTTTTTTTTTTTTT      LLL
BBBBBBBBBBBBBB      AAAAAAAAAA      SSSSSSSSSSSSSS      RRRRRRRRRRRR      TTTTTTTTTTTTTTTT      LLL
BBBBBBBBBBBBBB      AAAAAAAAAA      SSSSSSSSSSSSSS      RRRRRRRRRRRR      TTTTTTTTTTTTTTTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAAAAAAAAAAAAAAAAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAAAAAAAAAAAAAAAAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAAAAAAAAAAAAAAAAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBB      BBB      AAA      AAA      SSS      SSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSSSSSSSSSSSSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSSSSSSSSSSSSS      RRR      RRR      TTT      TTT      LLL
BBBBBBBBBBBBBB      AAA      AAA      SSSSSSSSSSSSSS      RRR      RRR      TTT      TTT      LLL
LLLLLLLLLLLLLLLLLLLL
```

```
BBBBBBBBB      AAAAAA      SSSSSSSS      IIIIII      NN      NN      SSSSSSSS      TTTTTTTTTT      RRRRRRRR
BBBBBBBBB      AAAAAA      SSSSSSSS      IIIIII      NN      NN      SSSSSSSS      TTTTTTTTTT      RRRRRRRR
BB      BB      AA      AA      SS      SS      SS      SS      SS      SS      TT      TT      RR      RR      RR
BB      BB      AA      AA      SS      SS      SS      SS      SS      SS      TT      TT      RR      RR      RR
BB      BB      AA      AA      SS      SS      SS      SS      SS      SS      TT      TT      RR      RR      RR
BBBBBBBBB      AA      AA      SSSSSS      III      II      NN      NN      SSSSSS      TT      TT      RRRRRRRR
BBBBBBBBB      AA      AA      SSSSSS      III      II      NN      NN      SSSSSS      TT      TT      RRRRRRRR
BB      BB      AAAAAAAAAA      SS      II      NN      NN      SSSSSS      TT      TT      RR      RR
BB      BB      AAAAAAAAAA      SS      II      NN      NN      SSSSSS      TT      TT      RR      RR
BB      BB      AA      AA      SS      SS      NN      NN      SSSSSS      TT      TT      RR      RR
BB      BB      AA      AA      SS      SS      NN      NN      SSSSSS      TT      TT      RR      RR
BBBBBBBBB      AA      AA      SSSSSSSS      IIIIII      NN      NN      SSSSSSSS      TT      TT      RR      RR
BBBBBBBBB      AA      AA      SSSSSSSS      IIIIII      NN      NN      SSSSSSSS      TT      TT      RR      RR

```

  

```
LL      IIIIII      SSSSSSSS
LL      IIIIII      SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLL      IIIIII      SSSSSSSS

```

```

1 0001 0 MODULE BASSINSTR (
2 0002 0 IDENT = '1-005'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 1 *
26 0026 1 *****
27 0027 1
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: String support library
32 0032 1
33 0033 1 ABSTRACT: This module takes 2 input strings of any class and dtype
34 0034 1 and returns the position of the substring in the main string
35 0035 1 starting at an input position
36 0036 1
37 0037 1 ENVIRONMENT: User mode, AST level or not or mixed
38 0038 1
39 0039 1 AUTHOR: R. Will, CREATION DATE: 10-Mar-79
40 0040 1
41 0041 1 MODIFIED BY:
42 0042 1
43 0043 1 R. Will, 10-Mar-79 : VERSION 01
44 0044 1 01 - original
45 0045 1 1-002 - String cleanup. Call STR$POS. RW 20-OCT-79
46 0046 1 1-003 - Correct a typo in the linkage specifications.
47 0047 1 JBS 02-NOV-1979
48 0048 1 1-004 - Use JSB entry point of STR_POSITION. RW 2-Nov-79
49 0049 1 1-005 - Use CALL entry point of STR_POSITION. RW 15-NOV-79
50 0050 1 --
51 0051 1
52 0052 1 !<BLF/PAGE>

```



```

54 0053 1 |
55 0054 1 | SWITCHES:
56 0055 1 |
57 0056 1 |
58 0057 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
59 0058 1 |
60 0059 1 |
61 0060 1 | LINKAGES: NONE
62 0061 1 |
63 0062 1 |
64 0063 1 |
65 0064 1 | TABLE OF CONTENTS:
66 0065 1 |
67 0066 1 |
68 0067 1 | FORWARD ROUTINE
69 0068 1 |     BAS$INSTR;                                ! find substring position
70 0069 1 |
71 0070 1 |
72 0071 1 | INCLUDE FILES:
73 0072 1 |
74 0073 1 |
75 0074 1 | REQUIRE 'RTLIN:RTLPSECT';                      ! Declare PSECTS code
76 0169 1 |
77 0170 1 |
78 0171 1 | MACROS: NONE
79 0172 1 |
80 0173 1 |
81 0174 1 | EQUATED SYMBOLS: NONE
82 0175 1 |
83 0176 1 |
84 0177 1 | PSECT DECLARATIONS
85 0178 1 |
86 0179 1 |
87 0180 1 | DECLARE_PSECTS (BAS);
88 0181 1 |
89 0182 1 |
90 0183 1 | OWN STORAGE: NONE
91 0184 1 |
92 0185 1 |
93 0186 1 | EXTERNAL REFERENCES:
94 0187 1 |
95 0188 1 |
96 0189 1 | EXTERNAL ROUTINE
97 0190 1 |     STR$POSITION;                                ! routine to do the actual search
98 0191 1 |

```

```
0192 1 GLOBAL ROUTINE BASSINSTR (
0193 1     START_POS,
0194 1     SRC_DESC,
0195 1     SUB_DESC
0196 1 ) : =
0197 1
0198 1 ++
0199 1 FUNCTIONAL DESCRIPTION:
0200 1
0201 1     This routine takes two source strings of any
0202 1     dtype and class and finds the position of the substring in the
0203 1     source string starting at the input starting position. The routine
0204 1     returns the position of the substring in the source string. This
0205 1     routine merely calls BASSPOS which does the exact same thing with
0206 1     the parameters in a different order
0207 1
0208 1 FORMAL PARAMETERS:
0209 1
0210 1     START_POS.rl.v     value of position in source to begin search
0211 1     SRC_DESC.rt.dx     pointer to descriptor of string to be searched
0212 1     SUB_DESC.rt.dx     pointer to descriptor of string to find
0213 1
0214 1 IMPLICIT INPUTS:
0215 1
0216 1     NONE
0217 1
0218 1 IMPLICIT OUTPUTS:
0219 1
0220 1     NONE
0221 1
0222 1 ROUTINE VALUE:
0223 1
0224 1     FIND_POS.wlu.v     value of start of substring in source string
0225 1
0226 1 SIDE EFFECTS:
0227 1
0228 1     This routine calls STR$POSITION and therefore may signal any of
0229 1     its errors or have any of its side effects, including locking
0230 1     a string from being written for a short period.
0231 1
0232 1 --
0233 1
0234 2 BEGIN
0235 2 RETURN STR$POSITION (.SRC_DESC, .SUB_DESC, START_POS);
0236 1 END;
                                !End of BASSINSTR
```

```
.TITLE BASSINSTR
.IDENT \1-005\

.EXTRN STR$POSITION

.PSECT _BASSCODE,NOWRT, SHR, PIC,2

.ENTRY BASSINSTR, Save nothing
PUSHAB START_POS
MOVQ SRC_DESC, -(SP)
```

```
0000 00000
04 AC 9F 00002
7E 08 AC 7D 00005
```

```
: 0192
: 0235
:
```

BAS\$INSTR  
1-005

L 7  
16-Sep-1984 00:39:12 VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 11:55:09 [BASRTL.SRC]BASINSTR.B32;1

Page 4  
(3)

00000000G 00

03 FB 00009  
04 00010

CALLS #3, STR\$POSITION  
RET

: 0236

; Routine Size: 17 bytes, Routine Base: \_BAS\$CODE + 0000

: 145 0237 1  
: 146 0238 1 END  
: 147 0239 1  
: 148 0240 0 ELUDOM

!End of module

# PSECT SUMMARY

Name	Bytes	Attributes
_BAS\$CODE	17	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

# COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:BASINSTR/OBJ=OBJ\$:BASINSTR MSRC\$:BASINSTR/UPDATE=(ENH\$:BASINSTR)

; Size: 17 code + 0 data bytes  
; Run Time: 00:01.6  
; Elapsed Time: 00:03.4  
; Lines/CPU Min: 9056  
; Lexemes/CPU-Min: 20981  
; Memory Used: 17 pages  
; Compilation Complete



0024 AH-BT13A-SE  
VAX/VMS V4.0

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BASINIGSC  
LIS

BASINIT  
LIS

BASINIDEF  
LIS

BASINIDFS  
LIS

BASINIGSB  
LIS

BASINSTR  
LIS

BASINTONE  
LIS

BASLEFT  
LIS

BASMARGIN  
LIS

BASINTOL  
LIS

BASKILL  
LIS

BASTOBEG  
LIS

BASTOEND  
LIS

BASMATADD  
LIS

BASMGAP  
LIS